

PRODUCT INFORMATION PACKET

Model No: 324TTDR16091

Catalog No: M823B

Vertical Pump Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 & 1000 RPM,
324HPV Frame, DP



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

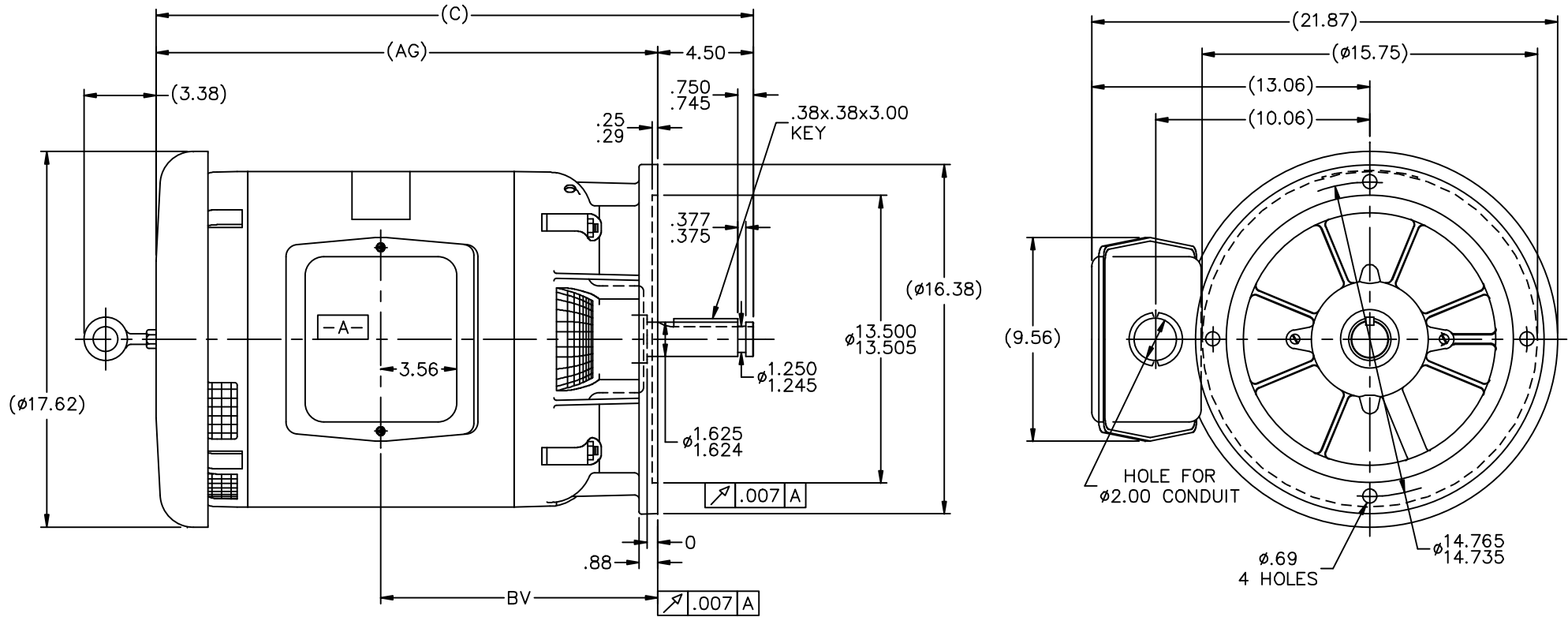
©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

Nameplate Specifications

| | | | |
|------------------------|------------------------------|----------------------------|--------------------------------|
| Phase | 3 | Output HP | 25 & 20 Hp |
| Output KW | 18.7 & 14.9 kW | Voltage | 230/460 & 190/380 V |
| Speed | 1182 & 982 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 324HPV | Enclosure | Drip Proof |
| Thermal Protection | No Protection | Efficiency | 93 & 92.4 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 65/32.5 & 64/32 A | Power Factor | 78 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Drive End Bearing Size | 6311 | Opp Drive End Bearing Size | 6311 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 22 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|------------------------------------|-----------------------|------------------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | .255 Ohms | Mounting | Round |
| Motor Orientation | Shaft Down | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Rolled Steel |
| Shaft Type | HP | Overall Length | 30.06 in |
| Frame Length | 14.50 in | Shaft Diameter | 1.625 in |
| Shaft Extension | 4.5 in | Assembly/Box Mounting | F1/F2 Capable |
| Outline Drawing | B-SS28314-1450 | Connection Drawing | A-EE7308 |



- NOTES:
 1. C'BOX CAN BE ROTATED IN 90° STEP.
 2. NAMEPLATE TO BE READ FROM SHAFT END OF MOTOR
 3. MAX. SHAFT RUNOUT .002

| DASH | FRAME | C | AG | BV |
|------|-------|-------|-------|-------|
| 1250 | 320 | 28.06 | 23.56 | 13.00 |
| 1400 | 320 | 29.56 | 25.06 | 13.75 |
| 1450 | 320 | 30.06 | 25.56 | 14.00 |
| 1500 | 320 | 30.56 | 26.06 | 14.12 |

| | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------|--------------|----------------------------------------------------------------|------------------|-------------------------------------|
| 16 | REVISED NOTE # 2 (ECN 23047) | REP 01-16-2012 | BW | TOLERANCES UNLESS SPECIFIED | | DRAWN MJD 01-27-1999 |
| 15 | ECN 16735 | NJS 6/21/2010 | BW | DEC. INCHES | | CHK ML 02-01-1999 |
| 14 | REVISED NAMEPLATE LOCATION 09-3901 | MSG 9/22/2009 | DR | .X ±.1 | | APPD DD 02-01-1999 |
| 13 | REDRAWN IN AUTOCAD | TAT 07-22-2004 | ML | .XX ±.03 | | SCALE 7=32 |
| 12 | REVISED TO NEC CONDUIT BOX CN 2842B | BJW 02-04-2000 | .XXX ±.005 | TITLE OUTLINE - 320HP FR. DR. PR. - STEEL C' BOX - 'P' BASE | | REF |
| 11 | FRAME TYPES NOW 320 CN 27400-327 | DRS 08-23-1999 | .XXXX ±.0005 | MAT'L | FMF | |
| NO. | REVISION | BY & DATE | CHK | ANG | FINISH | PREV |
| THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT | | | | RFP | CAD FILE ss28314 | SIZE B |
| | | | | DIST LB | | DRAWING NO. PAGE OF REV. SS28314 16 |

EE7308

THREE PHASE
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD
CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

| NO. | REVISION | BY & DATE | CHK | ANG | TOLERANCES UNLESS SPECIFIED | | FINISH | DRAWN RM 11/20/1990 | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------|-----|-------|--------------------------------|--------|--------------------------|---------------------|--------|--------------------|-----------|--------|
| | | | | | DEC. | INCHES | | | | | | |
| 5 | CHG TO REGAL LOGO | SL 09/10/2015 | AB | | | | | CHK ML 11/21/1990 | | | | |
| 4 | REVISED IEC NOTATIONS | MSG 11/15/2011 | CMN | .X | ±.1 | | | APPD SAS 04/24/2003 | | | | |
| 3 | ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194 | MSG 5/10/2010 | MJS | .XX | ±.02 | | TITLE CONNECTION DIAGRAM | SCALE 1=1 | | | | |
| 2 | ADDED THE OPTIONAL CORD CONNECTION MU46318 | RDH 04/24/2003 | DRS | .XXX | ±.005 | | 3Ø - DUAL VOLTAGE MOTOR | REF | | | | |
| 1 | REDRAWN | RM 11/20/1990 | | .XXXX | ±.0005 | | MAT'L. | FMF | | | | |
| | | | | | ±7'30" | | | PREV | | | | |
| THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT | | | | | | | RFP | CAD FILE ee7308 | SIZE A | DRAWING NO. EE7308 | PAGE OF 5 | REV. 5 |
| | | | | | | | DIST WP | | | | | |



Regal Beloit America, Inc.

CERTIFICATION DATA SHEET

Model#: 324TTDR16091 AN
CONN. DIAGRAM: A-EE7308
OUTLINE: B-SS28314-1450

WINDING#: 324680 NONE 2
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|-----------|-----------|----------|--------|-----------|----------|--------|
| 25&20 | 18.7&14.9 | 1200 | 1182&982 | 324HPV | DP | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|-------|---------------------|---------------|--------------------|----------------|------|-----------|-------|-----------|
| 3 | 60/50 | 230/460#190/ 380 | 65/32.5&64/32 | ACROSS THE LINE | CONTINUOU S | F3 | 1.15/1.15 | 40 | 3300 |

| FULL LOAD EFF: 93&92.4 | 3/4 LOAD EFF: 93 | 1/2 LOAD EFF: 91.7 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|---------------------------|------------------|--------------------|----------|-----------------|--------------|
| FULL LOAD PF: 78&78 | 3/4 LOAD PF: 73 | 1/2 LOAD PF: 62 | 92.4 | SQ CAGE IND RUN | 29 / 14.5 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|---------------|---------------|-------------|
| 112 LB-FT | 364 / 182 | 165 LB-FT 147 | 270 LB-FT 241 | 45 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|---------------------------|-------------|-------------|-------------|-----------------|-----------------|----------------------|
| 69 dBA | 79 dBA | 8.5 LB-FT^2 | 425 LB-FT^2 | 20 SEC. | 2 | 540 LBS. |

***** SUPPLEMENTAL INFORMATION *****

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|--------------------|---------------------|---------------|-------------|----------------|-----------------------|---------------|---------|------------------|
| P-BASE | STANDARD | ROUND | SHAFT DOWN | FALSE | NONE | TRUE | RODENT | BLUE (ENAMEL) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|----------------------------|-------------------|
| DE | OPE | | | | | | |
| BALL | BALL | POLYREX EM | HP | NONE | NONE | 1045 HOT ROLLED (C-204) | ROLLED STEEL |
| 6311 | 6311 | | | | | | |

| THERMO-PROTECTORS | | | | THERMISTORS | CONTROL | SPACE /n HEATERS |
|-------------------|------------|----------|----------|-------------|---------|------------------|
| THERMOSTATS | PROTECTORS | WDG RTDs | BRG RTDs | | | |
| NONE | NOT | NONE | NONE | NONE | FALSE | NONE VOLTS |

If Inverter equals NONE, contact factory for further information

*
N
O
T
E
S
*

| |
|---------------------------|
| INVERTER TORQUE: NONE |
| INV. HP SPEED RANGE: NONE |
| ENCODER: NONE |
| NONE NONE |
| NONE NONE PPR |
| BRAKE: NONE NONE |
| NONE P/N NONE |
| NONE NONE |
| NONE FT-LB NONE V NONE Hz |

DATE: 06/21/2017 04:29:58 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 15-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



324TTDR16091

Submittal

Data @ 460 V

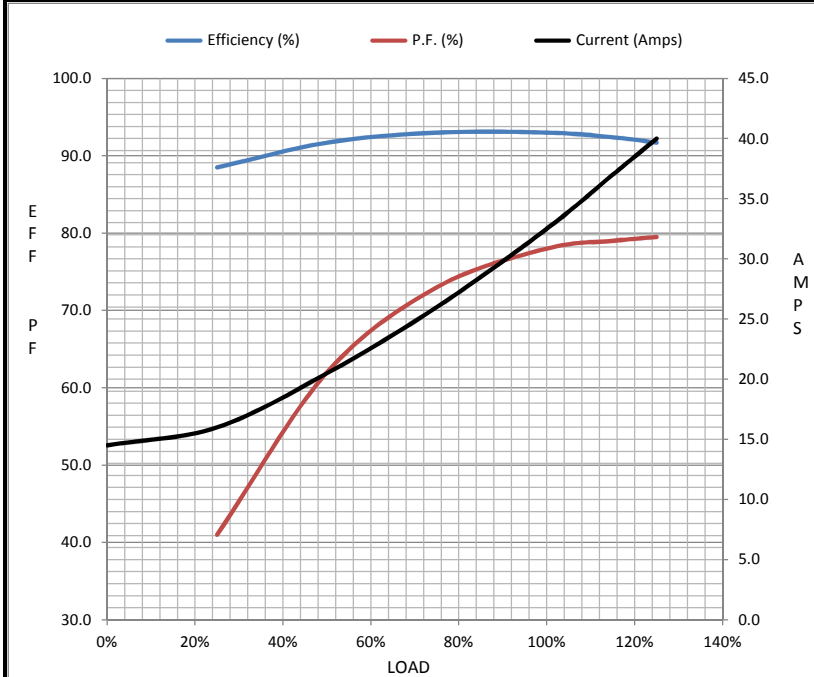
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 14.5 | 16.0 | 20.5 | 26.0 | 32.5 | 37.0 | 40.0 | 182 |
| Torque (ft-lb) | 0.00 | 27.5 | 55.0 | 83.5 | 112 | 128 | 140 | 165 |
| RPM | 1200 | 1195 | 1190 | 1188 | 1182 | 1,178 | 1175 | 0 |
| Efficiency (%) | | 88.5 | 91.7 | 93.0 | 93.0 | 92.4 | 91.7 | |
| P.F. (%) | 4.5 | 41.0 | 62.0 | 73.0 | 78.0 | 79.0 | 79.5 | 28.0 |

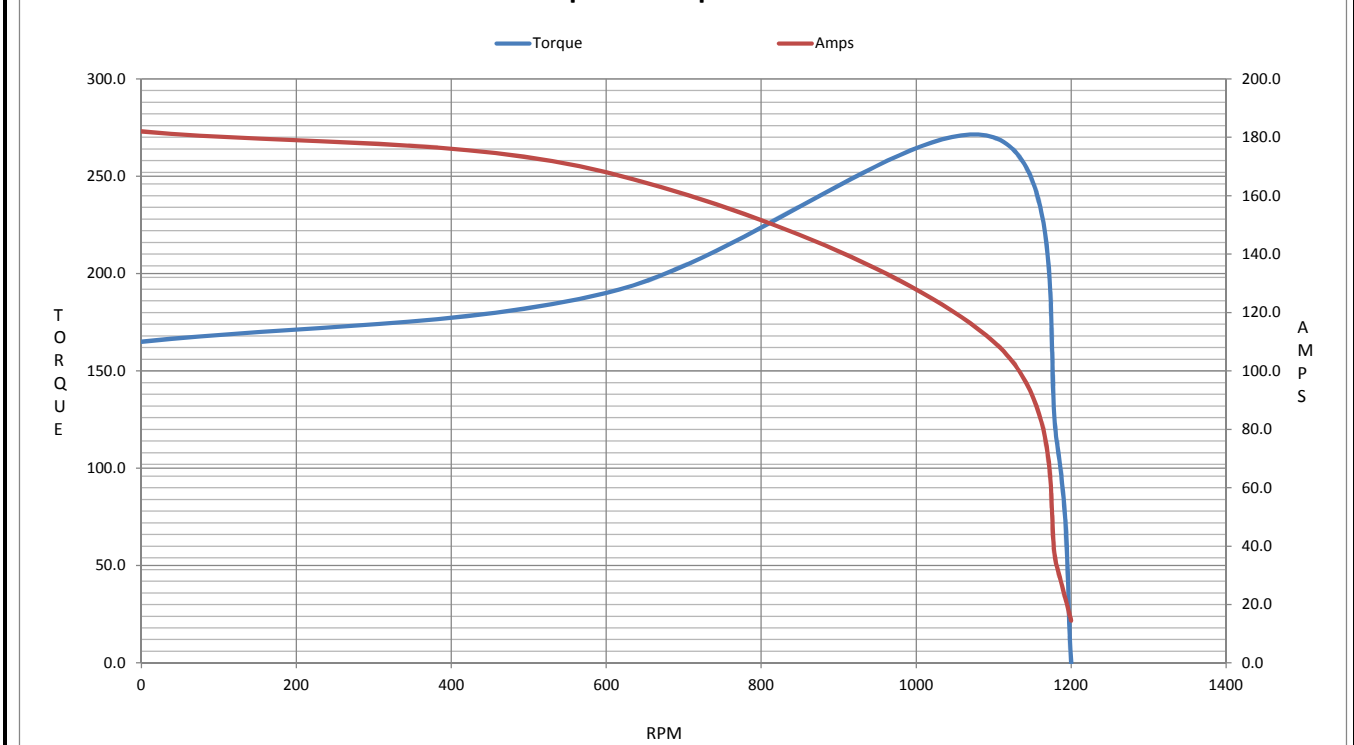
Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 600 | 1100 | 1182 | 1200 |
| Current (Amps) | 182 | 168 | 110 | 32.5 | 14.5 |
| Torque (ft-lb) | 165 | 190 | 270 | 112 | 0.00 |

| Information Block | | | | |
|-----------------------------|------------------------|--------|--------|---------|
| HP | 25.0 | | | |
| Sync. RPM | 1200 | | | |
| Frame | 324 | | | |
| Enclosure | DP | | | |
| Construction | TDR | | | |
| Voltage | 230/460#190/38(V) | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 45 ° C | | | |
| Duty | CONT | | | |
| Ambient | 40 ° C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 8.5 Lb-Ft ² | | | |
| Ref Wdg | 324680 NONE | | | |
| Sound Pressure @ 1M | 69 dBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | B-SS28314-1450 | | | |
| Conn. Diag | A-EE7308 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 365THFS8036 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.1760 | 0.1360 | 1.0460 | 1.3050 | 18.1150 |



Speed - Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 324TTDR16091

(Model No. may contain prefix and/or suffix characters)

Catalog No : M823B

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22